

# Inference

## **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	37	((under adj voltage or undervoltage) and (timer or delay)).clm.	US-PGPUB	OR	ON	2006/09/28 10:06

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	83	frequency near converter and under adj voltage	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/27 09:36
S2	3	frequency near converter and under adj voltage near (protect protecting protection)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 12:41
S3	20	voltage near converter and under adj voltage near (protect protecting protection)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 12:41
S4	14	voltage near converter and under adj voltage near (protect protecting protection) and (delay timer)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 14:06
S5	27	("2458658"   "2804553"   "3513325"   "3597623"   "3728516"   "3889178"   "3912980"   "3928746"   "3961154"   "4247752"   "4314195"   "4465920"   "4794232"   "4870248"   "4952774"   "4994646"   "5166567"   "5355075"   "5408067"   "5444214"   "5636114"   "5637246"   "5670070"   "5708254"). PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/02/10 14:00
S6	54	converter and under adj voltage near (protect protecting protection) and (delay timer)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 14:07
S7	27	converter and under adj voltage near (protect protecting protection) and (delay timer) and voltage near level	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 14:58
S8	0	converter and under adj voltage near (protect protecting protection) and (delay timer) and voltage near level and (start starter starting) near level	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 14:13

## EAST Search History

S9	2	under adj voltage near (protect protecting protection) and (delay timer) and voltage near first near level	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 14:59
S10	3	under adj voltage near (protect protecting protection) and (delay timer) and voltage near first near ( value level)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 15:10
S11	1473	361/92	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 15:10
S12	1607	start near up same (time delay timer) same (predetermined adj level threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/11 13:35
S13	31	start near up same (time delay timer) same ( level threshold) same first near level same second near level	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/11 13:51
S14	1515	(low near voltage or under near voltage) near (detect detecting protect protecting)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/11 13:53
S15	121	under near voltage near (detect detecting protect protecting)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/11 13:54
S16	43	under near voltage near (detect detecting protect protecting) same (time timer delay)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/11 13:54
S17	7	under near voltage near (detect detecting protect protecting) same (time timer delay) same (level threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/11 14:10
S18	1473	361/92	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/11 14:10

## EAST Search History

S19	565	361/92 and (timer delay)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/11 14:10
S20	38	361/92 and (timer delay) and first near level and second near level	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/11 14:22
S21	19	361/92 and (timer delay) and first near level and second near level and relay	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/11 14:23
S22	13	"4,306,265"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/13 12:33
S23	10	"3,940,664"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/13 12:34
S24	0	(under near voltage or undervolatge) near (protect protecting protection) and (timer delay) near (bypass bypassing)	US-PGPUB; USPAT	OR	ON	2005/02/13 14:30
S25	0	(under near voltage or undervolatge) near (protect protecting protection) and (timer timing delay) near (bypass bypassing)	US-PGPUB; USPAT	OR	ON	2005/02/13 14:30
S26	0	converter and under adj voltage near (protect protecting protection) and (delay timer) near (bypass bypassing)	US-PGPUB; USPAT	OR	ON	2005/02/13 14:34
S27	0	converter and under adj voltage near (protect protecting protection) and (delay timer) near (bypass bypassing bypassed)	US-PGPUB; USPAT	OR	ON	2005/02/13 14:34
S28	5	converter and under adj voltage near (protect protecting protection) and (delay timer) same (bypass bypassing bypassed)	US-PGPUB; USPAT	OR	ON	2005/02/13 14:47
S29	11	("3879647"   "4347558"   "4479175"   "4533986"   "4571551"   "4586119"   "4694386"   "4714978"   "4717994"   "4729085"   "4758940").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/02/13 14:39

## EAST Search History

S30	3	("4347558"   "4714978"   "4821163").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/02/13 14:41
S31	15	("4872100").URPN.	USPAT	OR	ON	2005/02/13 14:42
S32	8267	(delay timer) same (bypass bypassing bypassed)	US-PGPUB; USPAT	OR	ON	2005/02/13 14:47
S33	702	(delay timer) near (bypass bypassing bypassed)	US-PGPUB; USPAT	OR	ON	2005/02/13 14:47
S34	488	delay near (bypass bypassing bypassed)	US-PGPUB; USPAT	OR	ON	2005/02/13 14:47
S35	6	delay near (bypass bypassing bypassed) near switch	US-PGPUB; USPAT	OR	ON	2005/02/13 16:07
S36	1831	361/187	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/13 16:07
S37	1126	361/90	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/14 10:25
S38	1	10/710,659	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 10:10
S39	165	motor and frequency adj converter and starter	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 10:10
S40	9	motor and frequency adj converter and starter and (under near voltage or undervoltage)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 10:19
S41	0	motor and frequency adj converter and starter near relay and (under near voltage or undervoltage)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 10:16

## EAST Search History

S42	11	frequency adj converter and starter and (under near voltage or undervoltage)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 12:10
S43	1	frequency adj converter and starter and (under near voltage or undervoltage) and timer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 10:20
S44	11	frequency adj converter and starter and (under near voltage or undervoltage) and tim\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 11:10
S45	1	frequency adj converter and starter and (under near voltage or undervoltage) and timer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 12:11
S46	1722	(under near voltage or undervoltage) and timer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 12:11
S47	310	(under near voltage or undervoltage) and timer and relay near3 contact	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 12:12
S48	25	(under near voltage or undervoltage) near protect\$3 and timer and relay near3 contact	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 14:22
S49	4	"20020003686"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 14:23

## EAST Search History

S50	1	10/710,659	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/21 15:28
S51	13	IEEE near "446"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/22 13:36
S52	0	IEEE adj "446"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/22 13:36
S53	1	10/710,659	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/22 13:43
S54	160	(under adj voltage or undervoltage) near protect\$3 and (timer delay)	USPAT	OR	ON	2006/09/22 14:13
S55	38	(under adj voltage or undervoltage) near protect\$3 same (timer delay)	USPAT	OR	ON	2006/09/22 14:13
S56	52	(under adj voltage or undervoltage) near relay same timer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/22 15:01
S57	173	(under adj voltage or undervoltage) near relay same (timer delay)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/24 14:30
S58	24	(under adj voltage or undervoltage) near relay same (timer delay)	USPAT	OR	ON	2006/09/24 14:31
S59	30	(under adj voltage or undervoltage) near2 relay same (timer delay)	USPAT	OR	ON	2006/09/24 14:31
S60	24	("3784846").URPN.	USPAT	OR	ON	2006/09/24 14:43

## EAST Search History

S61	1	10/710,659	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/24 14:43
S62	193	(under adj voltage or undervoltage) near2 relay same (timer delay)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 11:31
S63	30	(under adj voltage or undervoltage) near2 relay same (timer delay)	USPAT	OR	ON	2006/09/25 11:28
S64	173	(under adj voltage or undervoltage) near relay same (timer delay)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 11:31
S65	173	(under adj voltage or undervoltage) near relay same (timer delay)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 11:31
S66	2	(under adj voltage or undervoltage) near relay same (timer delay) near contact	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 11:33
S67	3	(under adj voltage or undervoltage) near2 relay same (timer delay) near contact	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 11:33
S68	3	(under adj voltage or undervoltage) near2 relay same (timer delay) near3 contact same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 11:35
S69	3	(under adj voltage or undervoltage) near3 relay same (timer delay) near3 contact same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 11:36



## EAST Search History

S70	7	(under adj voltage or undervoltage) near3 relay and (timer delay) near3 contact same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 11:51
S71	3	(under adj voltage or undervoltage) near3 contact and (timer delay) near3 contact same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 13:29
S72	2	(under adj voltage or undervoltage or over adj voltage or overvoltage) near3 contact and (timer delay) near3 contact same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 13:44
S73	3	(under adj voltage or undervoltage or over adj voltage or overvoltage) near3 contact and (timer delay) near3 contact same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 13:45
S74	0	voltage near loss near3 contact and (timer delay) near3 contact same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 13:45
S75	0	voltage near3 loss near3 contact and (timer delay) near3 contact same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 13:46
S76	2	voltage near3 loss and (timer delay) near3 contact same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 13:47
S77	7	voltage near5 loss and (timer delay) near3 contact same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 13:53

## EAST Search History

S78	224	voltage near5 loss and (timer delay) same bypass\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 13:54
S79	132	voltage near5 loss and (timer delay) same bypass\$3	USPAT	OR	ON	2006/09/25 13:54
S80	132	voltage near5 loss and (timer delay) same bypass\$3	USPAT	OR	ON	2006/09/25 13:59
S81	1	voltage near5 loss same (timer delay) same bypass\$3	USPAT	OR	ON	2006/09/25 13:59
S82	989	low near voltage and (timer delay) same bypass\$3	USPAT	OR	ON	2006/09/25 14:01
S83	7	low near voltage and (timer delay) near contact same bypass\$3	USPAT	OR	ON	2006/09/25 14:00
S84	23	low near voltage near detect\$3 and (timer delay) same bypass\$3	USPAT	OR	ON	2006/09/25 14:20
S85	193	low near voltage near detect\$3 and (timer delay) same short\$3	USPAT	OR	ON	2006/09/25 14:20
S86	53	low near voltage near detect\$3 and (timer delay) near3 short\$3	USPAT	OR	ON	2006/09/25 14:21
S87	6	low near voltage near detect\$3 same (timer delay) near3 short\$3	USPAT	OR	ON	2006/09/25 14:21
S88	817	361/92.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/25 16:59
S89	1368	361/187.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/26 10:43
S90	538	361/90.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/26 13:29
S91	91	361/91.3.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/26 16:51

## EAST Search History

S92	1368	361/187.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/27 09:36
S93	37	((under adj voltage or undervoltage) and (timer or delay)).clm.	US-PGPUB	OR	ON	2006/09/28 10:06